Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC

Deputy City Manager, Environment & Infrastructure

Subject: Single Source: Adelaide Wastewater Treatment Plant Clarifier

Drive Replacement

Date: April 9, 2024

Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the replacement of a clarifier drive mechanism at Adelaide Wastewater Treatment Plant:

- a) The contract for supply and delivery **BE AWARDED** to Evoqua Water Technologies in the amount of \$60,000.00, excluding HST, as a single source award in accordance with Article 14.4.d of the Procurement of Goods and Services Policy;
- b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix 'A'; and
- c) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.
- d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project.

Executive Summary

Many components of the Adelaide Wastewater Treatment Plant are aging. City staff pursue preventive maintenance planning and activities to obtain the longest service life possible out of any installed equipment without jeopardizing treatment processes. The clarifier drive unit requested has reached its end of life, shows signs of deterioration, and spare parts are no longer available, requiring a complete replacement that suits the installed mechanism.

This report recommends the approval of a single source procurement and award the contract to Evoqua Water Technologies LLC ("Evoqua") for the supply and delivery of a replacement drive unit for secondary clarifier 2-4 (signifying Section 2, clarifier 4) at Adelaide Wastewater Treatment Plant.

Linkage to the Corporate Strategic Plan

This report supports the 2023-2027 Corporate Strategic Plan by contributing to the following outcome:

- Climate Action and Sustainable Growth
 - London's infrastructure and systems are built, maintained, and operated to meet the long-term needs of the community.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

None.

2.0 Discussion and Considerations

2.1 Description of Project and Justification for Single Source

The Adelaide Wastewater Treatment Plant currently provides sanitary servicing for north and northeast London. It has a rated capacity of 36,400 m³/d, making it London's third-largest treatment plant.

Secondary clarifiers are the final step before disinfection and discharge of treated water at the Adelaide plant. They are essentially large basins that allow any solids to settle out and be removed from the process. Clarifier mechanisms collect those settled solids, allowing them to be pumped to the solids thickening process prior to haulage to Greenway Wastewater Treatment Plant for preparation for final disposal.

Section 2 currently provides all treatment at Adelaide and it was constructed in 1977, meaning equipment original to that expansion project is approaching 50 years old. Preventive maintenance programs have kept the current equipment in operation but they are approaching or have reached their end of life. The clarifier mechanism in question (in clarifier 2-4) is now showing signs of probable failure so immediate action is required. Because of the age of the equipment there are no longer any spare parts available for further re-builds; a full replacement is the only option available to maintenance staff.

2.2 Procurement of Services

Staff are recommending the award of this purchase to Evoqua as a single source award because they are the current Canadian representative for the supply of the replacement drive unit. Since this is the drive unit designed to fit the existing clarifier mechanism, approval for the single source is being requested in accordance with Article 14.4.d of the Procurement of Goods and Services Policy: "There is a need for compatibility with goods and/or service previously acquired..."

3.0 Financial Impact/Considerations

The detailed source of financing is in included in Appendix A of this report. The purchase will be funded from existing capital sources as shown.

Conclusion

The replacement of the drive unit in clarifier 2-4 at Adelaide Treatment Plant must occur in order to maintain reliable operation and treatment processes. Evoqua is the Canadian representative of the clarifier manufacturer and is therefore the only source of the replacement drive. It is recommended that a purchase order to Evoqua Water Treatment Technologies in the total amount of \$60,000.00 plus HST be approved for this purchase.

Prepared by: Kirby Oudekerk, MPA, P.Eng.

Division Manager, Wastewater Treatment Operations

Submitted by: Ashley Rammeloo, MMSc., P. Eng.

Director, Water, Wastewater and Stormwater

Recommended by: Kelly Scherr, P. Eng., MBA, FEC

Deputy City Manager, Environment & Infrastructure

Appendix 'A' Source of Financing

cc: Steve Mollon, Senior Manager, Procurement and Supply
Jason Davies, Manager III, Financial Planning and Policy
Zeina Nsair, Financial Business Administrator, Finance and Corporate Services